



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,163	08/24/2001	Toshiya Yagou	SHC0139	4115
7590	03/05/2004			EXAMINER
Micheal S. Gzybowski Butzel Long 350 South Main Street STE 300 Ann Arbor, MI 48104			ANDERSON, CATHARINE L	
			ART UNIT	PAPER NUMBER
			3761	
DATE MAILED: 03/05/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/939,163	YAGOU ET AL.
	Examiner C. Lynne Anderson	Art Unit 3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5, 7-9, and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu (6,274,218).

Shimizu discloses a body fluid absorbent panel 2 for a sanitary article 1, as shown in figure 1. The body fluid absorbent panel 2 comprises a fibrous web having a plurality of openings 6 and barrier surrounding and defining the openings 6, as shown in figure 2. The body fluid absorbent panel 2 further comprises a shape holding layer 11 formed from a plurality of thermoplastic synthetic resin fibers, as disclosed in column 3, lines 1-4, and a body fluid retaining layer 12, as disclosed in column 3, lines 8-12. The shape holding layer 11 and body fluid retaining layer 12 have a surface pattern defined by the barriers that are coextensive, as shown in figures 1 and 2. The fibers of the shape holding layer 11 are hot welded together, as disclosed in column 3, line 3. The fibers of the body fluid retaining layer 12 are hot welded together, as disclosed in column 3, line 11. The shape holding layer 11 and body fluid retaining layer 12 are hot welded to each other along an interface at contact points, as disclosed in column 3,

lines 21-23. The hot welding inherently provides strength to the layers and therefore helps them resist collapsing under pressure.

With respect to claim 3, the barriers comprise first barriers extending parallel to and spaced apart from each other, and second barrier barriers extending parallel to and spaced apart from each other, as shown in figure 1.

With respect to claim 5, the open area of the body fluid absorbent panel 2 is between about 20% and 80%, as shown in figure 1. The openings have an area of about 20 mm², as disclosed in column 2, lines 54-55.

With respect to claim 7, a ration between the thickness of the shape holding layer 11 and the body fluid retaining layer 12 is between 6:4 and 8:2, as shown in figure 2.

With respect to claims 9 and 11, the body fluid absorbent panel 2 further comprises a mat-like liquid absorbent core 4, as shown in figure 2, having substantially no openings.

With respect to claim 12, the shape holding layer 11 comprises a liquid permeable material, as disclosed in column 3, lines 30-32.

With respect to claim 13, the shape holding layer 11 is capable of absorbing liquid, and surrounds the peripheral edges of each of the openings 6, as shown in figure 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (6,274,218) as applied to claim 1 above, and further in view of Colbert (5,479,335).

Shimizu discloses all aspects of the claimed invention with the exception of a second panel placed upon the first panel such that the openings of one panel are divided by the barriers of the other panel.

Colbert discloses a first panel 2 of fibrous web comprising a plurality of openings surrounded by barriers, as shown in figure 3. A second panel 4, also comprising a plurality of openings surrounded by barriers, is placed upon the first panel such that the barriers of the second panel 4 divide the openings of the first panel 2. This allows the complete structure, comprising both the first panel 2 and the second panel 4, to have smaller openings than either of the individual panels, as disclosed in column 8, lines 25-31.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to place a second panel upon the first panel of Shimizu, as taught by Colbert, to create a structure having smaller openings than either of the individual panels.

With respect to claim 10, Shimizu discloses the open area of the body fluid absorbent panel 2 is between about 20% and 80%, as shown in figure 1. The openings have an area of about 20 mm², as disclosed in column 2, lines 54-55. Colbert discloses a second panel having a total area of openings equal to that of the first panel, as disclosed in column 8, lines 28-29.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (6,274,218) as applied to claim 1 above, and further in view of Ellis et al. (5,490,846).

Shimizu discloses all aspects of the claimed invention but remains silent as to the compression resilience of the panel.

Ellis discloses a body fluid absorbent panel having a compression resilience of at least 60% to ensure that the panel does not collapse during use, as disclosed in column 7, lines 48-55.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the body fluid absorbent panel of Shimizu with a compression resistance of at least 60%, as taught by Ellis, so that the panel does not collapse during use.

Response to Arguments

Applicant's arguments with respect to the rejections in view of Chen et al. (6,395,957) have been fully considered and are persuasive, since the surface patterns of the shape holding and body fluid retaining layers are not identical, and therefore not coextensive. The rejection of 1-3, 5, 7-9, and 11 under 35 U.S.C. 102(e) as anticipated by Chen et al. has been withdrawn.

In response to applicant's argument that the heat sealing disclosed by Shimizu is not intended to resist collapse, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim

drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Shimizu discloses in column 3, lines 1-3 and 10-12, the layers comprise thermoplastic fibers that are heat sealed together. Shimizu does not disclose layers that are heat sealed around their edges, but rather explicitly discloses thermoplastic fibers that are heat sealed to one another. The fibers must therefore come into contact with each other, and are bonded at points of contact. The method of heat sealing involves in the welding together of the fibers, and will result in fibers that are bonded to each other to form a layer. A layer comprising fibers that are sealed together is more capable of resisting collapse than a layer of fibers that are not bonded to each other. Shimizu does not disclose the intent of using this method to form layers that are resistant to collapse, the layers disclosed are nonetheless resistant to collapse. The layers of Shimizu therefore fulfill the limitations of the claim.

The disclosure by Shimizu that the layer may instead comprise fibers that are mechanically entangled is irrelevant, as is the resistance to collapse of a layer comprising mechanically entangled fibers. Shimizu discloses an embodiment in which the fibers are heat sealed to each other, as described in the paragraph above.

With respect to claim 6, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge

which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (703) 305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WA
cla
March 2, 2004


JOHN D. CALVERT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700